

# Securing Critical Information Infrastructures and Services

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# 2011: Attacks on governments



# 2012: Flamer



Iran  
189

Israel  
Palestine  
98

Sudan  
32

Syria  
30

Lebanon  
18

Saudi  
Arabia  
10

Egypt  
5

# Cyber Exercises, the Big Three

- Europe's first ever international cyber security exercise, 2010
- First ever EU-US exercise, 2011. Work with Comm. & MS to build transatlantic cooperation
- Cyber Europe 2012. Developed from learning in 2010 & 2011 exercises. Involves MS, private sector and EU institutions. Highly realistic exercise, Oct 2012



**2<sup>nd</sup>** Pan - European  
Cyber Exercise



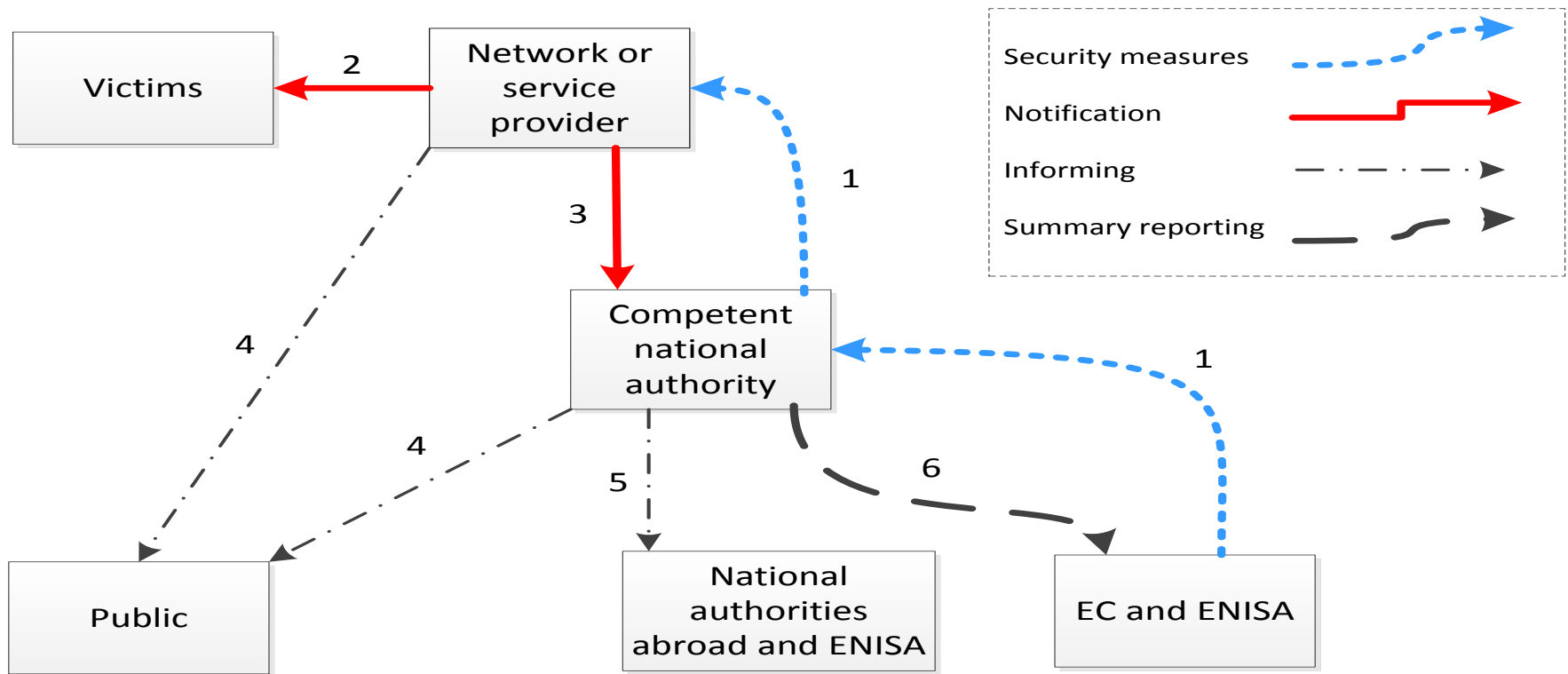
# Cyber Europe 2012 – media coverage

- More than 100 news stories so far – Europe, plus USA
- Most online and broadcast media
- Follow-up media requests still coming in (@ 08/10/2012)



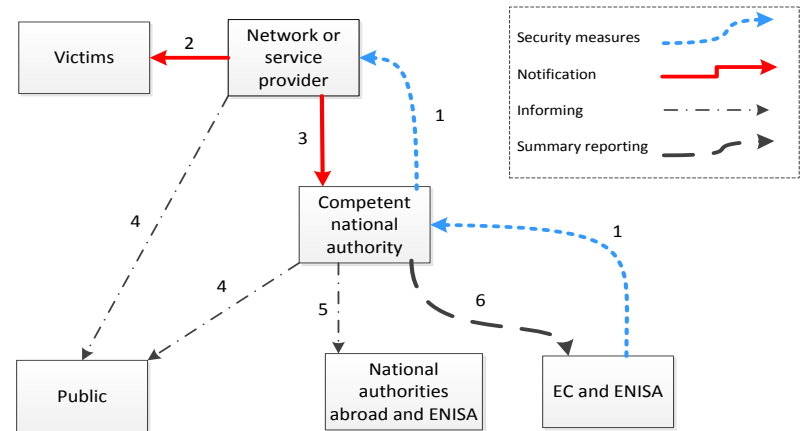
# Overview of Article 13a

- Appropriate security measures for e-comms providers
- Incident reporting for e-comms providers

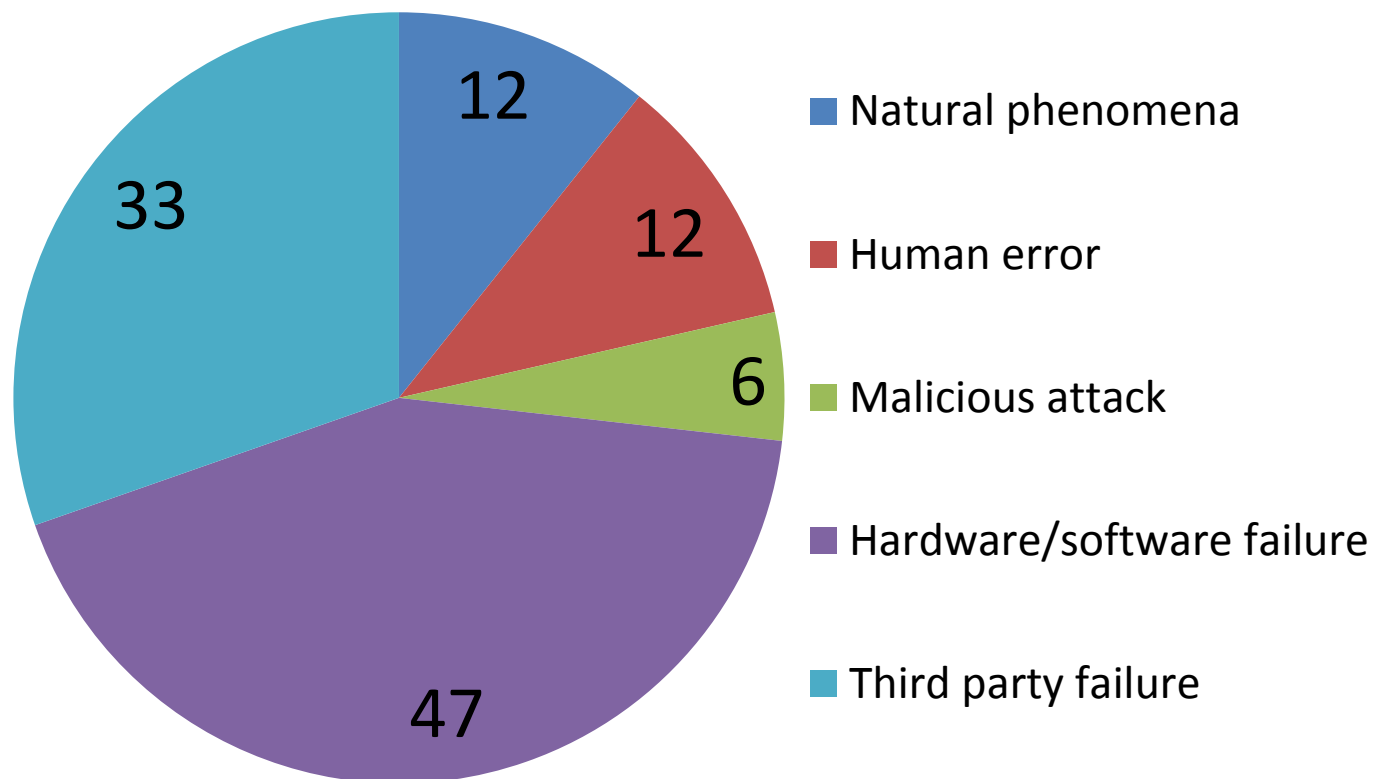


# Article 13a - Incidents 2011

- 51 incidents from 11 countries, 9 countries without significant incidents, 9 countries with incomplete implementation
- Most incidents
  - affect mobile comms (60%)
  - are caused by
    - hardware/software failures (47%)
    - third party failures (33%),
    - natural disasters (12%)
- Many involve power cuts (20%)
- Natural disasters (storm, floods, et cetera)
  - often cause power cuts, which cause outages
  - cause incidents lasting an average of 45 hours
- Next report spring 2013, expected around 500 incident reports



# Root Causes of 2011 incidents





# EP3R - Public Private Partnership for Resilience

- provide a platform for information sharing and stock taking of good policy and industrial practices
- discuss public policy priorities, objectives & measures
- improve coherence and coordination of policies for security and resilience in Europe;
- 3 Working Groups
  - WG 1: Interdependencies of ICTs to critical Sectors
  - WG 2: Baseline requirements for security and resilience of electronic communication networks
  - WG 3: Coordination and cooperation mechanisms
    - Botnets
    - Pan European exercise



# Cloud Computing

## Objectives for Cloud Computing at ENISA

- Help governments and businesses to leverage the cost benefits of cloud computing, with due consideration of security requirements and new risks
- Improve transparency on security practices to allow informed decisions
- Create trust and trustworthiness by promoting best practice and assurance standards

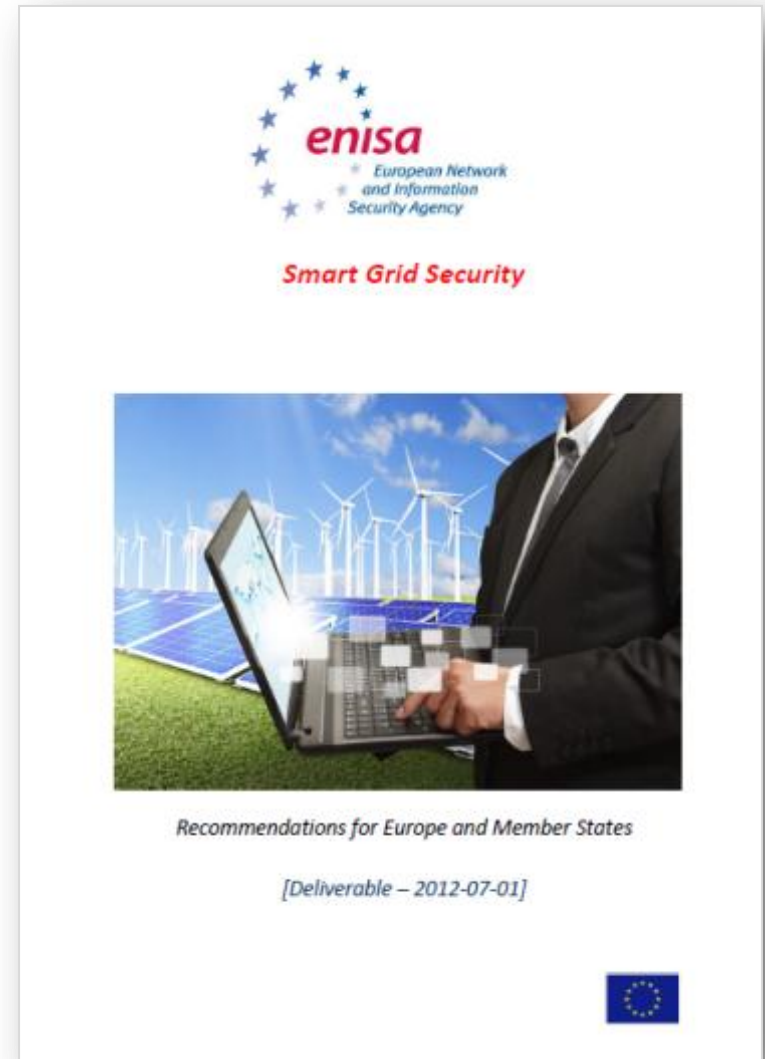
## Report defines minimum baselines for:

- Comparing cloud offers
- Assessing the risk to go Cloud
- Reducing audit burden and security risks



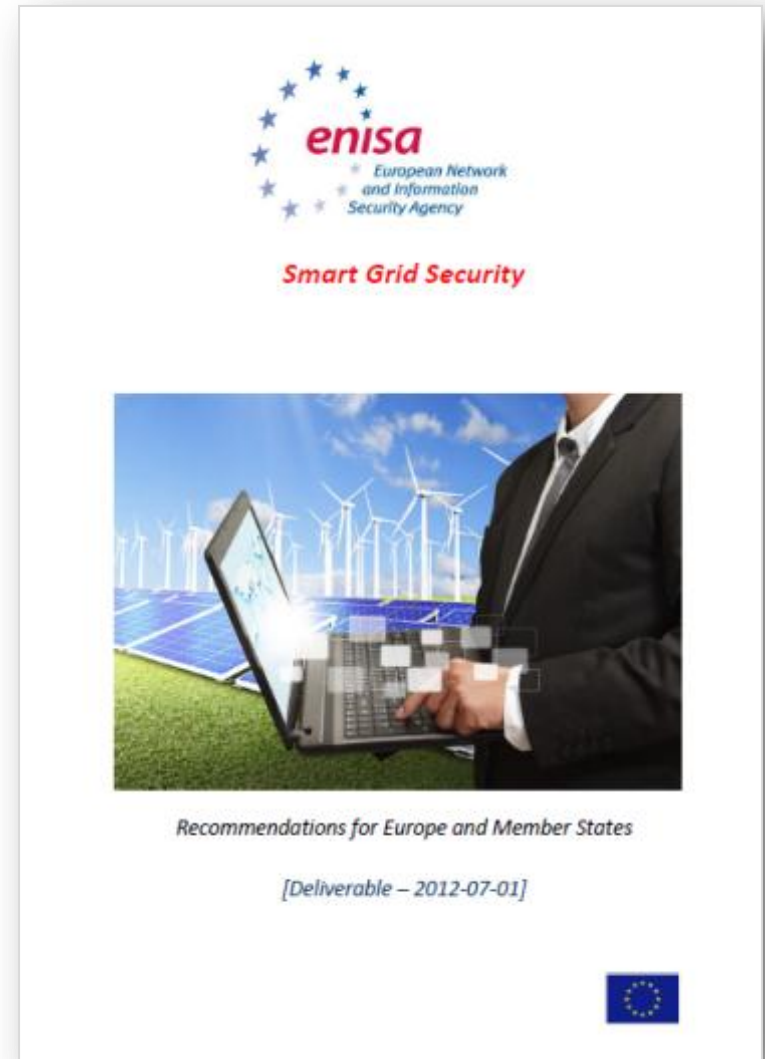
# Smart Grid Security

- **ENISA recommendations include:**
  - Establishing of clear regulatory and policy framework on smart grid cyber security at national and EU level – currently missing.
  - The EC, with ENISA, MS, and private sector, should develop minimum set of security measures based on existing standards and guidelines
  - EC and MS authorities should promote security certification schemes for the entire value chain of smart grids components, including organisational security



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